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#6  
PTO/SB/64 (10-01)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED  
UNINTENTIONALLY UNDER 37 CFR 1.137(b)**

Docket Number (Optional)  
*690089.401C3*

First named inventor: *Jonathan C. Mallari*

Application No.: *09/839,786*

Art Unit: *1745*

Filed: *April 19, 2001*

Examiner: *Mary Benton*

Title: *Silicon-Based Fuel Cell Electrode Structures and  
Fuel Cell Electrode Stack Assemblies*

Attention: Office of Petitions  
Assistant Commissioner for Patents  
Box DAC  
Washington, D.C. 20231

NOTE: If information or assistance is needed in completing this form, please contact Petitions  
Information at (703) 305-9282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the Office notice or action plus an extensions of time actually obtained.

**RECEIVED**

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION

AUG 28 2002

NOTE: A grantable petition requires the following items:

OFFICE OF PETITIONS

- (1) Petition fee;
- (2) Reply and/or issue fee;
- (3) Terminal disclaimer with disclaimer fee —required for all utility and plant applications filed before June 8, 1995; and for all design applications; and
- (4) Statement that the entire delay was unintentional.

1. Petition fee

Small entity-fee \$ 640 (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27.

Other than small entity - fee \$ \_\_\_\_\_ (37 CFR 1.17(m))

2. Reply and/or fee

A. The reply and/or fee to the above-noted Office action in the form of Response to Notice of Incomplete Reply (Non-provisional) (identify type of reply):

has been filed previously on \_\_\_\_\_.

is enclosed herewith.

B. The issue fee of \$ \_\_\_\_\_.

has been paid previously on \_\_\_\_\_.

is enclosed herewith.

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 1.0 hour to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

## 3. Terminal disclaimer with disclaimer fee

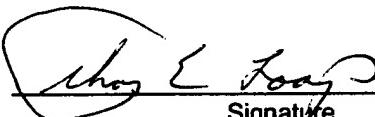
- Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.
- A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ \_\_\_\_\_ for a small entity or \$ \_\_\_\_\_ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

## 4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE. The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D)).]

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

August 20, 2002  
Date

Telephone  
Number: (206) 448-3284

  
\_\_\_\_\_  
Signature

Thomas E. Loop  
Typed or printed name

2033 Sixth Avenue, Suite 1020  
Address

Seattle, Washington 98121-2584

Enclosures:  Fee Payment

Reply

Terminal Disclaimer Form

Additional sheets containing statements establishing unintentional delay

Other: \_\_\_\_\_

## CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]

I hereby certify that this correspondence is being:

- deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Box DAC, Washington, D.C. 20231.
- transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (703) 308-6916.

August 20, 2002  
Date

  
\_\_\_\_\_  
Signature

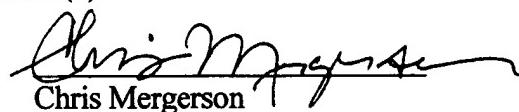
Chris Mergerson  
Typ or printed name of person signing certificate



COPY OF PATENT  
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, in an envelope addressed to Assistant Commissioner for Patents, Box DAC, Washington, D.C. 20231, on August 20, 2002, as part of a Petition for Revival of an Application for Patent Abandoned Unintentionally Under 37 CFR 1.137(b).

August 20, 2002  
Date

  
Chris Mergerson

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jonathan C. Mallari and Chung M. Chan  
Serial No : 09/839,786  
Filed : April 19, 2001  
For : SILICON-BASED FUEL CELL ELECTRODE STRUCTURES AND  
FUEL CELL ELECTRODE STACK ASSEMBLIES

Art Unit: 1745

Examiner: Mary Benton

Attention: Office of Petitions  
Assistant Commissioner for Patents  
Box DAC  
Washington, D.C. 20231

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AUG 28 2002  
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DECLARATION OF THOMAS E. LOOP

Dear Sir:

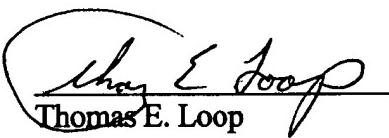
I, Thomas E. Loop, patent attorney of record for U.S. Application No. 09/839,786, filed on April 19, 2001, and entitled, "Silicon-Based Fuel Cell Electrode Structures and Fuel Cell Electrode Stack Assemblies," hereby declare that the delay by Applicant in replying to the outstanding Notice of Incomplete Reply (Nonprovisional) was unintentional.

I have reviewed the case file and have learned that our initial response to the Notice to File

Missing Parts of Nonprovisional Application, dated June 15, 2001, was deemed insufficient, because substitute drawings were required; therefore, a subsequent Notice of Incomplete Reply (Nonprovisional) was later issued, dated November 9, 2001. Unfortunately, this subsequent Notice was not brought to my attention by my assistant, and was inadvertently placed in the case file without proper docketing.

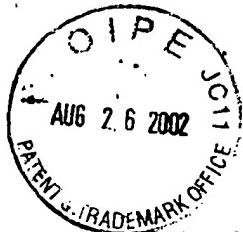
I have just learned of the subsequent Notice and its requirement for the submission of substitute drawings as a result of a just completed case file review. Accordingly, the entire delay in filing the required reply, submitted concurrently herewith, from the due date for the reply until the filing of this petition, was unintentional.

Respectfully Submitted,  
LOOP Intellectual Property Law PLLC

  
Thomas E. Loop  
Registration No. 42,810  
Attorney for Applicant

LOOP Intellectual Property Law PLLC  
2033 Sixth Avenue, Suite 1020  
Seattle, Washington 98121-2584  
(206) 448-3204  
Fax: (206) 441-5514  
[thomas@looplaw.net](mailto:thomas@looplaw.net)

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, in an envelope addressed to Assistant Commissioner for Patents, Box DAC, Washington, D.C. 20231, on August 20, 2002, as part of a Petition for Revival of an Application for Patent Abandoned Unintentionally Under 37 CFR 1.137(b).

August 20, 2002  
Date

  
Chris Mergerson

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jonathan C. Mallari and Chung M. Chan  
Serial No : 09/839,786  
Filed : April 19, 2001  
For : SILICON-BASED FUEL CELL ELECTRODE STRUCTURES AND  
FUEL CELL ELECTRODE STACK ASSEMBLIES

Art Unit: 1745

Examiner: Mary Benton

Attention: Office of Petitions  
Assistant Commissioner for Patents  
Box DAC  
Washington, D.C. 20231

RESPONSE TO NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

Dear Sir:

In response to the Notice of Incomplete Reply (Nonprovisional), dated November 9, 2001, enclosed are the following necessary documents: Substitute drawings in compliance with 37 CFR 1.84; Petition for Extension of Time; a check in the amount of \$460, for a three-month extension of time for a small entity; and copies of the Notice of Incomplete Reply (Nonprovisional), and original Notice to File Missing Parts.

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Respectfully Submitted,  
LOOP Intellectual Property Law PLLC

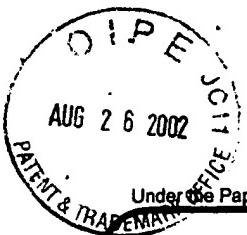
  
Thomas E. Loop  
Registration No. 42,810  
Attorney for Applicant

TEL: csm

Enclosures:    Substitute drawings  
Petition for Extension of Time  
Check for \$460 (extension of time fee for small entity)  
Copy of Notice of Incomplete Reply (Nonprovisional)  
Copy of original Notice to File Missing Parts

LOOP Intellectual Property Law PLLC  
2033 Sixth Avenue, Suite 1020  
Seattle, Washington 98121-2584  
(206) 448-3204  
Fax: (206) 441-5514  
thomas@looplaw.net

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PTO/SB/21 (08-00)

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

50AE

# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	09/839,786
		Filing Date	04/19/2001
		First Named Inventor	Jonathan C. Mallari
		Group Art Unit	1745
		Examiner Name	Mary Benton
Total Number of Pages in This Submission	14	Attorney Docket Number	690089.401C3

## ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input checked="" type="checkbox"/> Fee Attached	<input checked="" type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input checked="" type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input checked="" type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input checked="" type="checkbox"/> Response to Missing Parts/ Incomplete Application	<input type="checkbox"/> Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

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## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Thomas E. Loop, Registration No. 42,810 LOOP Intellectual Property Law PLLC
Signature	
Date	08/20/2002

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date:

August 20, 2002

Typed or printed name	Chris Mergerson
Signature	
Date	08/20/2002

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



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PTO/SB/17 (10-01)

Approved for use through 10/31/2002. OMB 0651-0032  
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# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT	(\\$) 1100.00
-------------------------	---------------

**Complete If Known**

Application Number	09/839,786
Filing Date	04/19/2001
First Named Inventor	Jonathan C. Mallari
Examiner Name	Mary Benton
Group Art Unit	1745
Attorney Docket No.	690089.401C3

**METHOD OF PAYMENT**

1.  The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number   
Deposit Account Name

Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

Applicant claims small entity status. See 37 CFR 1.27

2.  Payment Enclosed:

Check  Credit card  Money Order  Other

**FEE CALCULATION**

**1. BASIC FILING FEE**

Large Entity Small Entity

Fee Code (\$)	Fee (\$)	Fee Code (\$)	Fee Description	Fee Paid
101	740	201	370 Utility filing fee	<input type="text"/>
106	330	208	165 Design filing fee	<input type="text"/>
107	510	207	255 Plant filing fee	<input type="text"/>
108	740	208	370 Reissue filing fee	<input type="text"/>
114	160	214	80 Provisional filing fee	<input type="text"/>

SUBTOTAL (1) (\\$) 0.00

**2. EXTRA CLAIM FEES**

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** = <input type="text"/>	X <input type="text"/>	= <input type="text"/>
Multiple Dependent	-3** = <input type="text"/>	X <input type="text"/>	= <input type="text"/>

Large Entity Small Entity

Fee Code (\$)	Fee (\$)	Fee Code (\$)	Fee Description
103	18	203	9 Claims in excess of 20
102	84	202	42 Independent claims in excess of 3
104	280	204	140 Multiple dependent claim, if not paid
109	84	209	42 ** Reissue independent claims over original patent
110	18	210	9 ** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\\$) 0.00

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)**

**3. ADDITIONAL FEES**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105	130	205 65 Surcharge - late filing fee or oath	<input type="text"/>
127	50	227 25 Surcharge - late provisional filing fee or cover sheet	<input type="text"/>
139	130	139 130 Non-English specification	<input type="text"/>
147	2,520	147 2,520 For filing a request for ex parte reexamination	<input type="text"/>
112	920*	112 920* Requesting publication of SIR prior to Examiner action	<input type="text"/>
113	1,840*	113 1,840* Requesting publication of SIR after Examiner action	<input type="text"/>
115	110	215 55 Extension for reply within first month	<input type="text"/>
116	400	216 200 Extension for reply within second month	<input type="text"/>
117	920	217 460 Extension for reply within third month	<input type="text"/>
118	1,440	218 720 Extension for reply within fourth month	<input type="text"/>
128	1,960	228 980 Extension for reply within fifth month	<input type="text"/>
119	320	219 160 Notice of Appeal	<input type="text"/>
120	320	220 160 Filing a brief in support of an appeal	<input type="text"/>
121	280	221 140 Request for oral hearing	<input type="text"/>
138	1,510	138 1,510 Petition to institute a public use proceeding	<input type="text"/>
140	110	240 55 Petition to revive - unavoidable	<input type="text"/>
141	1,280	241 640 Petition to revive - unintentional	<input type="text"/>
142	1,280	242 640 Utility issue fee (or reissue)	<input type="text"/>
143	460	243 230 Design issue fee	<input type="text"/>
144	620	244 310 Plant issue fee	<input type="text"/>
122	130	122 130 Petitions to the Commissioner	<input type="text"/>
123	50	123 50 Processing fee under 37 CFR 1.17(q)	<input type="text"/>
126	180	126 180 Submission of Information Disclosure Stmt	<input type="text"/>
581	40	581 40 Recording each patent assignment per property (times number of properties)	<input type="text"/>
146	740	246 370 Filing a submission after final rejection (37 CFR § 1.129(a))	<input type="text"/>
149	740	249 370 For each additional invention to be examined (37 CFR § 1.129(b))	<input type="text"/>
179	740	279 370 Request for Continued Examination (RCE)	<input type="text"/>
169	900	169 900 Request for expedited examination of a design application	<input type="text"/>
Other fee (specify) _____			<input type="text"/>
*Reduced by Basic Filing Fee Paid			SUBTOTAL (3) (\\$) 1100.00

**SUBMITTED BY**

Complete (if applicable)

Name (Print/Type)	Thomas E. Loop	Registration No. (Attorney/Agent)	42,810	Telephone	(206) 448-3204
Signature				Date	08/20/2002

WARNING: Information on this form may be made public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

AUG 26 2002  
U.S. PATENT & TRADEMARK OFFICE

NOT CORRECT  
DRAWINGS  
SEE PAPER NO. 11

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FIG. 1

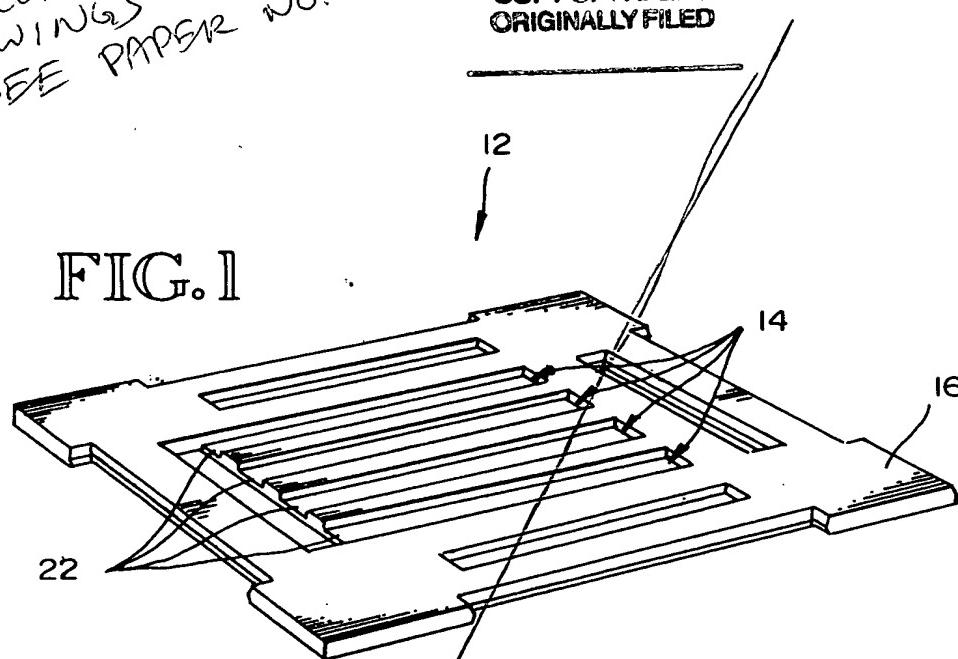
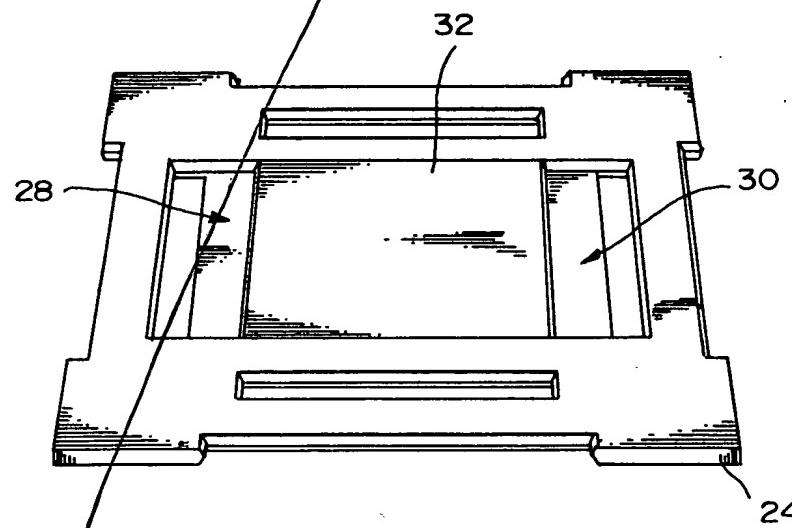


FIG. 2





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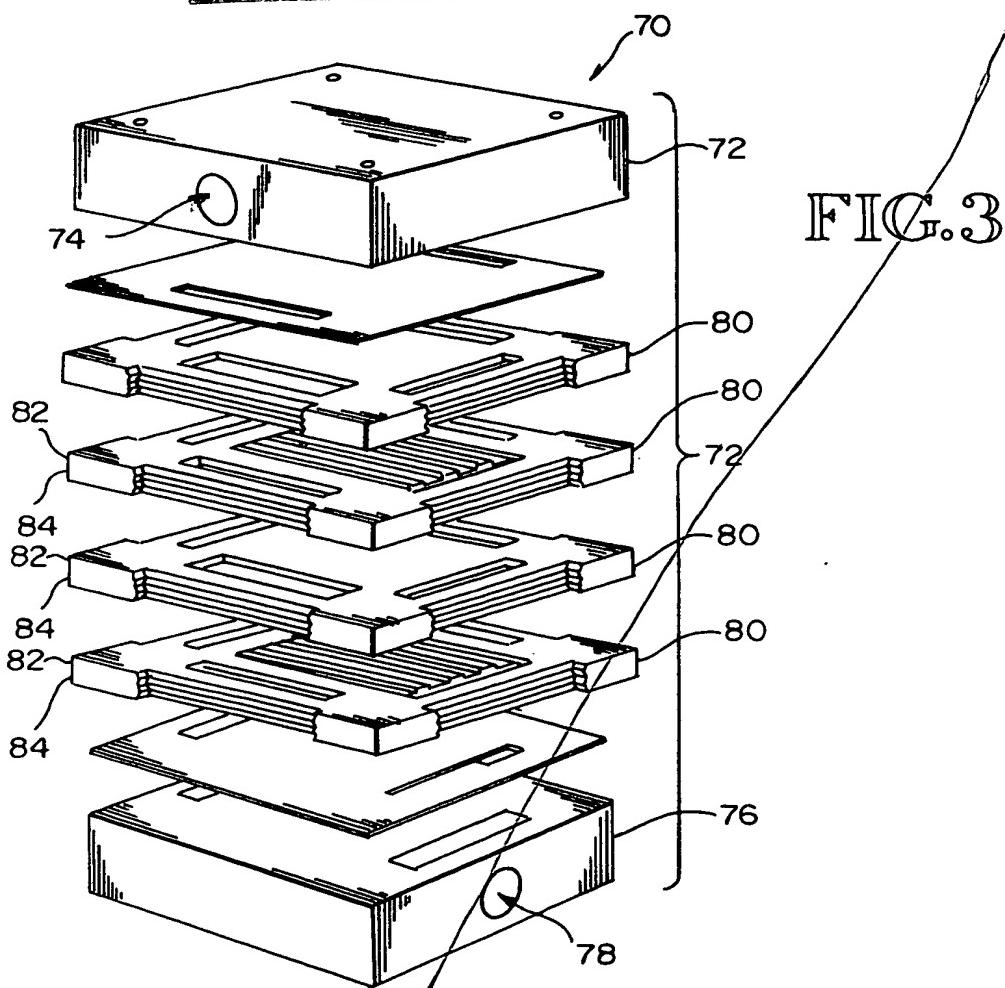


FIG. 3

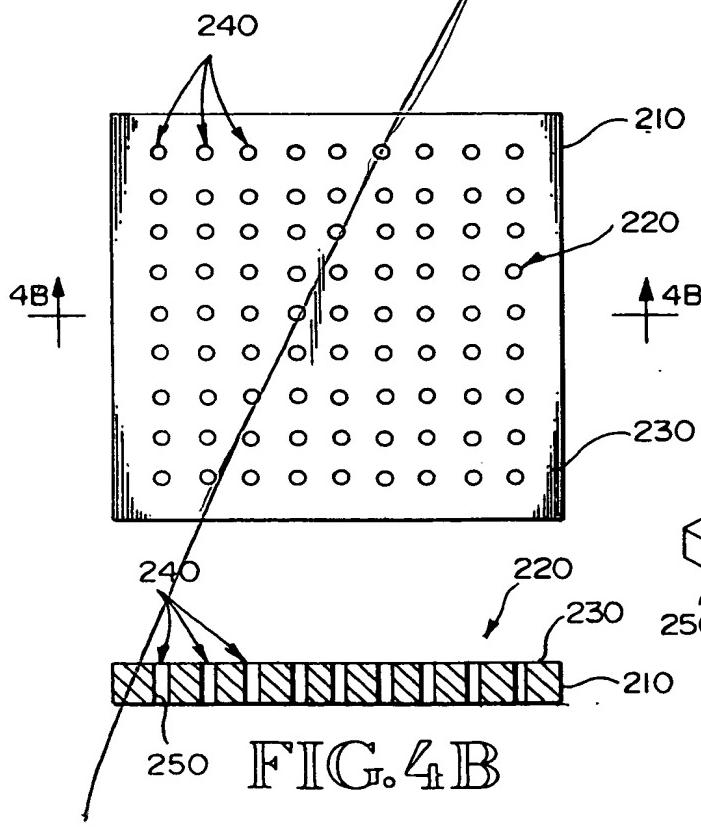


FIG. 4A

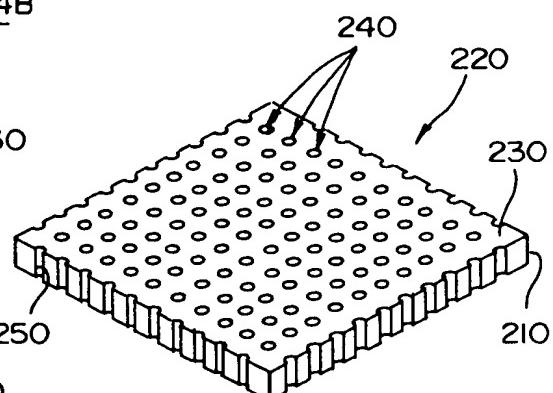


FIG. 4B

FIG. 4C



**UNITED STATES PATENT AND TRADEMARK OFFICE**

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/839,786	04/19/2001	Jonathan C. Mallari	690089.401C3

Thomas E. Loop  
of Loop Intellectual Property Law PLLC  
Post Office Box 21346  
Seattle, WA 98111-3346

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**CONFIRMATION NO. 2552**  
**FORMALITIES LETTER**  
  
 \*OC000000007050979\*

Date Mailed: 11/09/2001

**NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)**

***Filing Date Granted***

The U.S. Patent and Trademark Office has received your reply on 09/14/2001 to the Notice to File Missing Parts (Notice) mailed 06/15/2001 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
  - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

*A copy of this notice **MUST** be returned with the reply.*

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Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/839,786	04/19/2001	Jonathan C. Mallari	690089.401C3

00500  
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC  
701 FIFTH AVE  
SUITE 6300  
SEATTLE, WA 98104-7092

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**CONFIRMATION NO. 2552**

**FORMALITIES LETTER**



\*OC000000008185995\*

Date Mailed: 06/15/2001

**NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION**

**FILED UNDER 37 CFR 1.53(b)**

***Filing Date Granted***

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 65.**

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
  - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

*A copy of this notice **MUST** be returned with the reply.*

*Sadij*  
Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY